



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

MMC2/0928

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APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/368,442	08/04/99	019	LESTER, F	2873 09/28/00
First Named Applicant	TENG,	35 USC 154(b) term ext. = 0 Days.		

TITLE OF INVENTION METHOD AND APPARATUS FOR REDUCTION OF TRAPEZIODAL DISTORTION AND IMPROVEMENT OF IMAGE SHARPNESS IN AN OPTICAL IMAGE CAPTURING SYSTEM

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3	404302000400	350-728.000	S98	UTILITY	YES \$605.00	12/28/00

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/368,442	08/04/99	TENG	H 404302000400

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EXAMINER

LESTER, E

ART UNIT

PAPER NUMBER

2873

DATE MAILED:

09/28/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Notice of Allowability

Application No.
09/368,442

Applicant(s)
Teng et al

Examiner
Evelyn Lester

Group Art Unit
2873



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to Interview on 9-27-00

☒ The allowed claim(s) is/are 1-19

☐ The drawings filed on _____ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☒ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. _____

☐ including changes required by the proposed drawing correction filed on _____, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Interview Summary, PTO-413

☒ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☒ Examiner's Statement of Reasons for Allowance

Georgia Epps
Georgia Epps
Supervisory Patent Examiner
Technology Center 2800

Art Unit: 2873

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rimas T. Lucas (reg.no. 46,451) on September 27, 2000.

2. The application has been amended as follows:

In the specification, page 3 (line 19) and page 15 (line 4), the U.S. patent number "4,688,995" was corrected to ~~4,688,995~~ 4,668,995; and on page 18 (line 3), "viewing surface 322" was corrected to ---viewing surface 320---; also on page 18 (line 12), ~~viewing surface 318~~ "viewing surface 318" was corrected to ---imaging surface 318---.

Additionally, in the specification, on page 14 (line 7), the status of the co-pending U.S. patent application serial number 09/191,428 was updated, and the following was inserted after the file date on line 8, ---still pending,---.



Art Unit: 2873

In the claims, the following changes were made:

Claims 5 and 9-11 at lines 4-5, and claims 16-19 at lines 5-6, the following was deleted, "adjacent to the intersection of the viewing surface and the imaging surface" and the following was inserted after "first angle,":

a. ~~with~~ the first angle being interior to a triangular area formed by the viewing surface, the imaging surface and the at least one light ray~~with~~

Claim 7, line 2, "triangular prism" was changed to ~~light refractor~~.

Claims 2-4 and 13-15, a period was inserted at the end of each of these claims.

Claims 13-15 at line 2, the semicolon, ":", was ~~changed~~ to a colon, "-----".

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The prior art does not show or fairly suggest the claimed invention of a compact apparatus for forming a high contrast, low distortion image of a patterned object having the claimed structure and claimed limitations, wherein a rejection under 35 USC 102 or 103 would be improper. Please particularly note the combination of claimed elements and limitations, specifically noting the limitation directed to the angles γ and δ . Therefore, especially in light of the above approved amendments, the claimed invention is considered to be in condition for allowance as being novel and nonobvious over the prior art.

Art Unit: 2873

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Information Disclosure Statement

4. The Applicants should note that the U.S. Patent 4,688,995, cited on the PTO-1449 as reference 6, was considered to be irrelevant to the claimed invention. Therefore, it was crossed off the PTO-1449 and will not be listed on the published patent. The Applicants' representative confirmed that U.S. Patent 4,688,995 was incorrectly cited both on the PTO-1449 and in the specification. Please note that the intended and correct reference of U.S. Patent 4,668,995 by Chen et al has been considered and cited on the enclosed PTO-892. Also note that by the above Examiner's Amendment, the specification has been appropriately corrected as well.

Drawings

5. The application having been allowed, formal drawings are required in response to this Office action.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



Art Unit: 2873

The following U.S. patents are directed to optical image analysis utilizing a light refractor:

U.S. PATENT NUMBER	INVENTOR'S NAME
3,527,535	Monroe
3,864,042	Leventhal
5,189,482	Yang
5,623,553	Sekiya
5,963,657	Bowker et al

The following are Japanese published patent applications directed to fingerprint optical image analysis systems:

JAPANESE REF. NO.	INVENTOR'S NAME
JP 61-145686 A	Sasagawa et al
JP 61-221883 A	Igaki et al
JP 62-74177 A	Eguchi et al
JP 2-133892 A	Kato et al
JP 2-188888 A	Igaki et al
JP 3-95693 A	Uchida et al
JP 3-246693 A	Hanari et al
JP 3-292578 A	Kawasaki

A

Art Unit: 2873

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to E.A. Lester whose telephone number is (703) 308-4943. The examiner can normally be reached on Monday-Friday (except for first Fridays of a biweek) from about 8:30 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on (703) 308-4883. The fax number for Technology Center 2800 is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Evelyn A. Lester
Patent Examiner
AU 2873
September 27, 2000



Georgia Epps
Supervisory Patent Examiner
Technology Center 2800

